

**ABSTRACT:**Communications Systems and Methods

This invention generally relates to networks of communications devices, in particular ultra wideband (UWB) communications devices.

An ultra-wideband (UWB) network comprising a plurality of UWB devices each forming a node of said network, pairs of said UWB devices being configured for communication with one another using one of a plurality of UWB channels, each said UWB device comprising a UWB transceiver for bidirectional communication over one or more of said UWB channels with at least one other of said UWB devices; and a device controller coupled to said UWB transceiver, said controller being configured to determine a said UWB channel for use in establishing a communication link with each other UWB device; whereby said network is configured for automatic construction of a set of communications links between said nodes of said network.

Figure 6